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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,167	07/08/2003	Chung-Hsin Huang	MR1115-465	6507
4586	7590	06/02/2004	EXAMINER	
ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLIOTT CITY, MD 21043			VU, HIEN D	
		ART UNIT		PAPER NUMBER
				2833

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/614,167	HUANG ET AL.
	Examiner Hien-D. Vu	Art Unit 2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-10 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Specification***

1. The specification is objected to because page 7, lines 13-14, "bards" appears to be – boards –, and "33and" should be – 33 and --.

### ***Claim Objections***

2. Claim 4 is objected to because in line 2, it is unclear how a single flange could be on inner surfaces.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito (5,876,217) in view of Olson (5,310,357).

Ito discloses substantially the claimed invention except for a projection forming on the second spring contact portion and extending away from the second base portion. Olson, figures 7 and 9a show a projection 150 forming on a second spring contact portion 118 and extending away from the second base portion 152. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the connector of Ito, by forming the second spring contact portion with a projection

which extends away from the second base portion, as taught by Olson, in order to increase the withdrawal force of the receptacle from the plug.

As to claim 2, a contact end 14 has a bent angle that is substantially less than 90 degrees.

As to claim 3, the projection 150 with an arc surface.

As to claim 4, a flange 16 on inner surfaces of the side walls of the receptacle 4 interlocking with a wedge hole 25 of the plug 5.

As to claim 5, a retention portion 10.

As to claim 6, receiving holes 11 for receiving retention portion 10.

As to claim 7, a pair of barbs 12 on opposite edges of the retention portion.

5. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito (217) in view of Olson (357) as applied to claim 1 above, and further in view of Goto (0027036).

Ito in view of Olson does not show the retention portion having a locking portion extended parallel with the first base portion. Goto, figure 3 shows a retention portion 21 having a locking portion 21A extended parallel with a first base portion 22. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the connector of Ito by forming the retention portion with a locking portion to be extended parallel with the first base portion, as taught by Goto, in order to provide more securing for the first terminal in the receptacle. Also in absence of any showing of criticality by the applicant to form the locking portion to be extended toward the first

spring contact terminal would have been an obvious modification since such change solves no stated problem.

As to claims 9-10, it would have been obvious to modify the connector of Ito by forming the opposite inner surfaces of the lateral boards with engaging holes for engaging with bent free end of the second spring contact, as taught by Goto (shown in figure 3), in order to secure the second terminal in the plug.

6. Ito et al. (092), Ono, Okura and Goto (524) are cited for disclosure of board-to-board interconnection.
7. Any inquiry concerning this communication should be directed to Hien Vu at telephone number 571-272-2016.

HV



HIEN VU  
PRIMARY EXAMINER